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Catholic Education Archdiocese of Canberra & Goulburn and
University of Southern Queensland
A Joint Research Project

Leadership of System-School Alignment: Leading Actioning of Schoolwide Pedagogy (SWP) for School Improvement

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Catholic Education Archdiocese of Canberra Goulburn and
University of Southern Queensland
A Joint Research Report

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Also, to the research project administrator:

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Research Team

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Executive Summary

Overview

A small number of schools in the Catholic Education Canberra and Goulburn (CECG) System have engaged with a whole school improvement project called Innovative Designs for Enhancing Achievements in Schools (IDEAS) (<http://ideas.usq.edu.au/>). During the IDEAS process each school develops a vision for learning and a school wide approach to pedagogy (called Schoolwide Pedagogy (SWP)). IDEAS models an organisational learning process that is based on the concept of alignment (structural and cognitive). In actioning SWP schools are encouraged to align their action with school based improvement priority areas and to focus professional learning and resourcing on processes that add value to their priority area(s). Whilst schools are engaged with IDEAS, they also are required to meet System priority area(s) and accountability frameworks. The question then arises whether the two initiatives, IDEAS and System frameworks and initiatives, complement or conflict with each other.

Therefore, this research project traced the implementation of a school-based contextual specific pedagogical approach to teaching and learning (SWP) in a school defined priority area for improvement. The study also explored how school leaders use the SWP and meta-thinking to respond authentically to system and broader government requirements.

The research question arising from this problem:

How do school leaders use their contextually created SWP and meta-thinking about organisational process to respond to school priority areas and system and government requirements regarding student improvement?

1. What processes emerge as authentic responses to implementation?
2. What evidence of impact can be collected and reported?
3. What leadership action emerges as effective action during the implementation process?
4. What explanation for sustained success(es) emerges from the preceding analysis?

Research Process

The researchers tracked four schools over two years through group discussion, collection of artefacts and relevant school-based documentation. The process of data collection involved three phases over two years:

Phase 1 – A workshop was facilitated by CECG and USQ-LRI and was attended by the four schools: by using the SWP as a lens for implementation, schools were asked to use their identified priority focus to develop a Pedagogical-Operational-Managerial (POM) plan. Schools then mapped this into their Annual Improvement Plan (AIP). For some schools this initially created some confusion as their priority focus had been adopted for their Collaboration on School Achievement (COSA) project. However, through dialogue with the researchers, this enabled them to align their focus for improvement with the System priorities.

Phase 2 – A visit to each school was conducted by the research team (USQ-LRI and CECG School Services Senior Officer) during and at the end of year 1 to track progress and discuss emerging evidence including semi-structured interviews and school documentation. An interim research report for the System was produced noting a thematic analysis of emerging themes.

Phase 3 – All schools delivered presentations at the end of year 2 to provide evidence of improvement (in attendance were an additional USQ-LRI researcher and an external critical friend both of whom had not been involved in the previous phases).

Each school had or was developing an SWP at the beginning of the research project. Over the two years a researcher from each of USQ-LRI and CECG worked with each school, keeping the above as guidelines for focusing conversations toward their action plan. Each school was allocated one hour for their presentation which comprised the school's focus together with discussion stimulated by the critical friend. Schools were also asked to produce copies of relevant documentation.

Findings

The outcomes from the study reported the following findings:

Within-school alignment

Findings of this research study indicate several factors crucial to enhancing school improvement within the school: a mindset for ongoing improvement; development of trusting relationships; and principal leadership. This is captured in the diagram highlighting the importance of “Leadership of school’s prioritised purpose for improvement”.

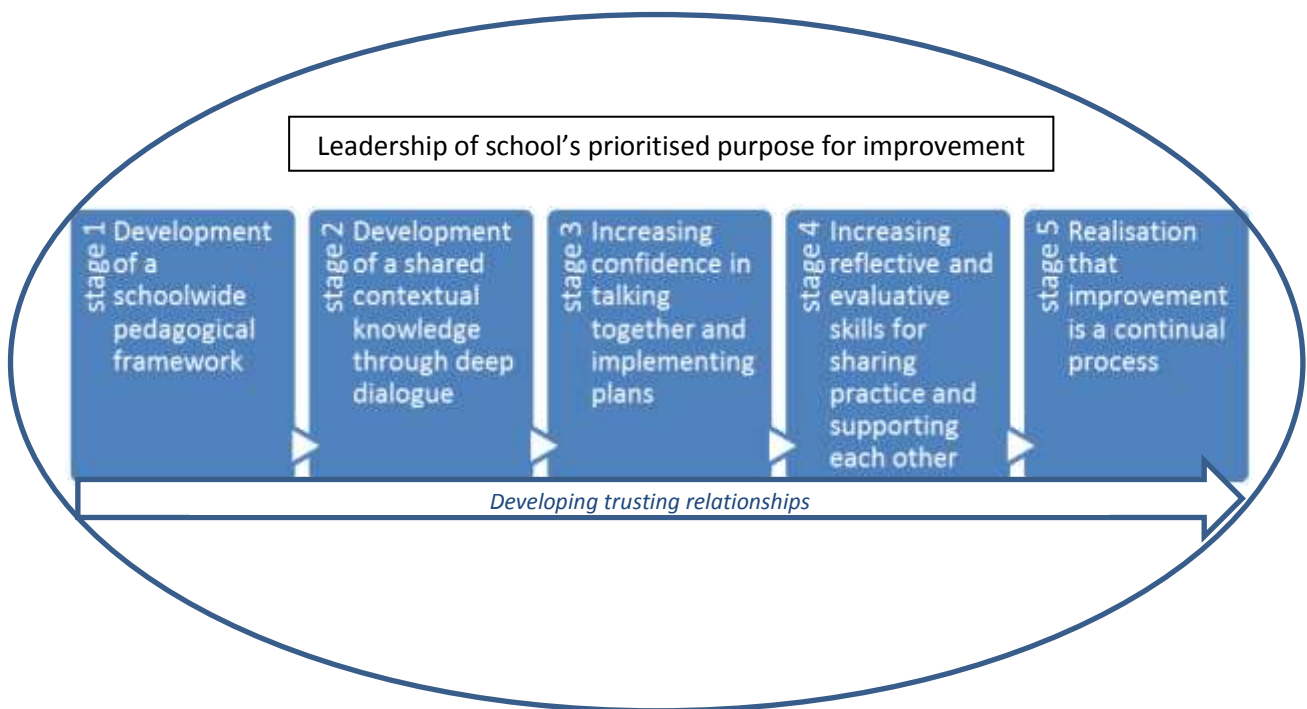


Figure 3: Within-School Alignment

Thus, it is proposed that within-school alignment requires:

- context sensitivity;
- an ongoing process for developing teachers' capacity for ongoing improvement;
- focus on the school's priority for improvement; and
- enabling processes and structures by the principal working in conjunction with teacher leader(s).

School-System Alignment

The understanding that has emerged from this study as captured in the model, “Leadership for System-School Alignment”, has revealed that alignment between systems and schools is dependent upon the relationship between the principals and

System support officers. Where the System has developed accountability frameworks such as the School Improvement Framework and the Performance & Development Cycle, along with System priority projects (such as COSA) that appear to be complex from the school's perspective, there is heightened need for collaborative leadership between the System and the school.

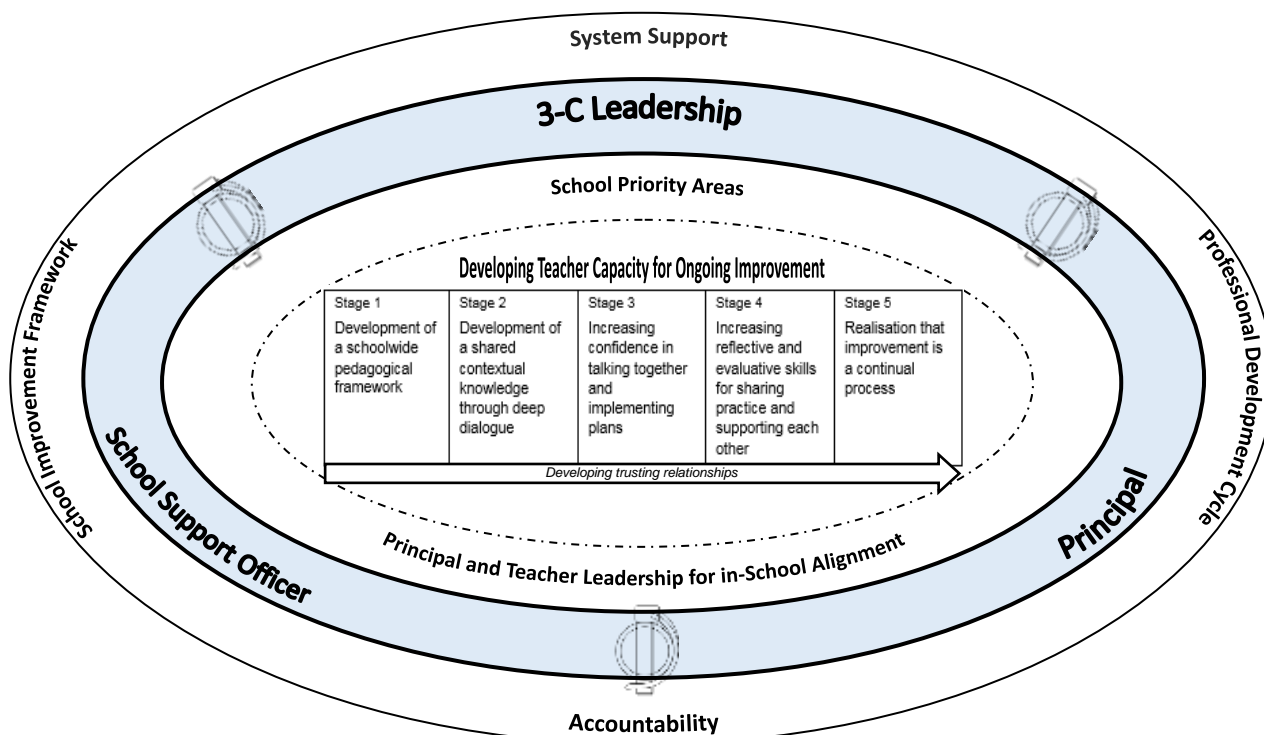


Figure 5: 3-C Leadership for System-School Alignment

Thus, a vital component is for the CECG officers and the principals to work through the messiness together to determine the aligned priority that is achievable in the school's context. System-School Alignment (or coherence) refers to the inter-relationship between the organisational structures and the processes of achieving cognitive consensus involving organisation members. Cognitive consensus is the engagement in collective thinking to develop agreed goals,

Leadership for system-school alignment is conceptualised as an inter-related action between the principal and relevant system school-support personnel. Leadership provides the linchpin for system-school alignment and is actioned through 3-Cs of leadership – Collaborative, Contextual, Collegial.

Such 3-C leadership provides the linchpin between system and school responsiveness to be accountable for meeting system requirements and in-school challenges.

Recommendations

Recommendation 1

That the System continue to support the schools by adopting the '3-C Leadership for System-School Alignment' model.

Recommendation 2:

That the System consider the worth of facilitating ways of supporting principals in developing pedagogical understandings.

Recommendation 3:

That schools develop a Vision that includes the growth of teachers' shared pedagogical understandings.

Recommendation 4:

That the processes (e.g. COSA) for CECG officers supporting schools be aligned with internal school review (ISR) recommendations as derived by school staff and supported by the principal. To enable this to occur, the processes for connection of schools to CECG must be clearly articulated.

Recommendation 5:

That schools be accountable to the System for improvement data related to the School's priority goals.

Conclusion

The Catholic Education Archdiocese of Canberra Goulburn Education System has developed frameworks and tools for school improvement. This research has identified the importance of system-school leadership in contributing to alignment of these system initiatives in school contexts. The linchpin enabling this action is the 3-Cs of leadership – collaborative, contextual and collegial.

Within-school alignment has been enabled by a school developing a clear school purpose to focus professional learning on what matters within that context. For this study, schools selected had engaged with IDEAS and developed a Vision and a Schoolwide Pedagogy (SWP). This framework provided a common learning and

achievement language for pedagogical action across the school and facilitated the embedding of specific action (e.g. literacy, numeracy) in response to the school's particular identified needs. Such thinking (cognitive consensus) and action of teachers led by the principal with the teacher leader(s) has resulted in positive, accountable outcomes.

This research reveals that schools can effectively respond to the increasing complexity in an era of accountability if they have developed processes and focused strategies for within-school alignment. Such processes and strategies include a clearly articulated school wide development of long term aspirational goals, short term action related to priority needs, and professional learning that focuses on pedagogy. The actioning of agreed purpose relates to leadership of a mutualistic relationship between the principal and teacher leaders.

Introduction

This research project over two years aimed to trace the implementation of a school-based contextually specific pedagogical approach to teaching and learning, called a Schoolwide Pedagogy (SWP) in a school defined priority area for improvement. The study also explored how school leaders use their SWP and meta-thinking to respond authentically to school, system and broader government requirements.

Context:

The IDEAS project in Catholic Education Archdiocese of Canberra Goulburn Schools

The participant schools had been engaged in a whole school improvement project, IDEAS (<http://ideas.usq.edu.au/>) and had developed an organisational framework for ongoing improvement: that is a Vision and Schoolwide Pedagogical (SWP) Framework. At the commencement of this research, three of the schools had been engaged with the IDEAS project for two to three years, whilst the other had engaged with IDEAS seven years previously.

Overview of IDEAS

The IDEAS Project is a school improvement initiative that is designed to enable school leaders to manage development processes in their schools with a view to enhancing and sustaining success – in teacher professionalism, in community support and in student achievement. Ideally the IDEAS project enables schools to position themselves for the future by creating processes and capacities that enable the sustainability of school outcomes. IDEAS is a grounded way of working that is manifested in the IDEAS Principles of Practice, that is:

1. **Teachers are the Key** – IDEAS is centred around the creation of a shared approach to teaching and learning (Schoolwide Pedagogy – SWP) in which teachers are the central players. This acknowledges teacher leadership, and the preparedness to subject existing pedagogical practices to professional scrutiny.

2. **Professional learning is the key to professional revitalisation** – locating professional learning at the centre of school revitalisation, IDEAS signifies the centrality of classroom teachers in the process of school revitalisation.
3. **No Blame** – processes rather than people are the focus of attention, personalised criticism and blame are avoided.
4. **Success breeds success** – enables the professional community of the school to accept that they are responsible for their school's achievements.
5. **Alignment of school processes is a collective school responsibility** – a fundamental goal for an IDEAS school is to create a meaningful alignment between the school's strategic vision and values, community expectations of the school, the use of school infrastructures, pedagogical practices and professional development.

IDEAS is distinguished by four key "components":

Component one: A longitudinal strategy for school revitalisation (the *ideas* process)

The ***ideas*** process is a five-phase strategy, spread over a 2- to 3-year period, that enables school leaders to manage processes of implementing their own school priorities. Each of the five phases – *initiating*, *discovering*, *envisioning*, *actioning* and *sustaining* – centres on the professional work of teachers, both pedagogically and in relation to leadership.

Component two: Organisational alignment: The Research-based Framework for Enhancing School Outcomes (RBF)

In the IDEAS Project, the concept of internal school "alignment" (or "coherence" or "harmony" or "tunefulness" or "fit") is a major consideration, linked inextricably to the search for enhanced school outcomes. It is defined as follows:

Alignment in educational organisations occurs when distinct and interdependent organisational elements are mutually re-enforcing, thereby providing increased opportunities for capacity-building. (Adapted from Crowther & Associates, 2011, p. 175)

The five fundamental variables that contribute to alignment in educational organisations are:

- *The organisation's leadership and strategic management capability;*
- *The organisation's internal and external (i.e. parents) stakeholder support;*

- *The organisation's infrastructural designs (including curricula, spatial arrangements, technologies, marketing, quality assurance strategies);*
- *The organisation's pedagogical practices (teaching, learning and assessment);*
- *The organisation's professional learning mechanisms.*

Research shows that when these five sets of variables are developed, and in alignment with each other, a school's potential to enhance its outcomes are maximised.

Component three: 3-dimensional pedagogy (3-D.P)

The work of the 21st century professional teacher is conceptualised in the IDEAS Project as three dimensional, and as encompassing the integration of personal pedagogy (PP), schoolwide pedagogy (SWP) and authoritative pedagogy (AP). *3-dimensional professionals* with new levels of professional expertise on three dimensions present as:

The personal dimension – where personal talents and gifts shape students' learning;

The school dimension – where a teacher contributes to, enhances and critiques the school's agreed pedagogical priorities;

The authoritative dimension – where individual and schoolwide pedagogical practices are grounded in expert thinking.

Thus, **3-D.P** involves development of personal gifts and talents. But that is not all. It involves concrete collaborative activities to develop schoolwide pedagogical understanding. But that is not all either. It involves classroom applications of the SWP and testing of the SWP against globally authoritative pedagogical theories.

Component four: Parallel leadership

Parallel leadership is conceptualised as:

a process whereby teacher leaders and their principals engage in collective action for purposes of schoolwide development and revitalisation to enhance the school's 'capacity'. (Crowther et al., 2002, 2009)

Overview of School Review and Development in Catholic Education Archdiocese of Canberra Goulburn

The recently developed School Improvement Framework (SIF) (Figure 1) seeks to integrate the statutory requirements for the Registration of Archdiocesan schools with a cyclical model for school improvement. The program operates within a five-year cycle and has a focus on schools being engaged in a model of self-review; implementing processes for the development of teaching and learning; annually submitting documentation that outlines the school's goals, policies, procedures, certification requirements; and a validation visit by a registration panel.



Figure 1: Framework for School Improvement (Archdiocese of Canberra and Goulburn, in press, 2017)

The Framework (Figure 1) outlines how the principles of school improvement, that is, responsibility, excellence and accountability fit the purpose of school improvement. Schools conduct internal school reviews (ISR) (self-reviews) based on the National School Improvement Tool (Masters, 2012), then design their Annual Improvement Plan (AIP). Catholic Education supports schools in various ways and one of these is through a process titled “Collaboration on School Achievement” (COSA): a contact teacher in schools and a CECG officer from the Curriculum service area work collaboratively in classrooms with teachers to support school based improvement.

The school improvement agenda, including processes such as COSA, respond to identified school improvement priority areas. The interrelationship between the components in Figure 1 show that they complement each other and are vital to the success of school improvement strategies.

Information and evidence of student achievement is collected through the Educational Performance and Reporting Toolkit (ePART). This is a web-based application that captures data on literacy and numeracy diagnostic assessment from Kindergarten to Year 6 through the CECG Intranet. The information collected represents a system-wide approach to analysing and reporting literacy and numeracy achievement and progress of students.

This approach has the following purposes:

1. There is one portal for the collection and reporting of results of diagnostic assessment;
2. Reliable and timely information is provided to staff at both the school and System levels;
3. The application is designed to track both achievement and progress of individual students and cohorts as they progress from year to year and school to school; and
4. The information promotes effective and targeted decision-making to improve student learning outcomes.

The ePART application represents a minimum System requirement for schools to:

- collect and enter diagnostic assessment data;
- identify individual and collective areas of strength and vulnerability;
- enable decisions to be made about support and challenge to individual students and cohorts; and
- support their approaches to school improvement based on identifying need and planning of the response.

It is important that the collection of data on literacy and numeracy is then used, in conjunction with data from other sources, as the basis for making decisions about improving the learning outcomes for each student. This moves from reporting where students are to where they need to be.

Literature review

Introduction

The literature review for this study addresses a number of key areas. It focuses on the relationship between an education system and its schools in a complex and changing environment. The rapidity of this change makes large scale education reform imperative, while also making it more difficult. To be successful in a changing environment, school systems need to adapt, continuing to learn, drawing on available data for guidance while not losing sight of individual school context and support needs. These circumstances have clear implications for how successful leadership may be understood and enacted at both school and system level. The concept of adaptive leadership is briefly addressed, along with the associated key concepts of capacity building and 'coherence-making' or alignment.

Previous experiences of systemic school education reform have provided some salutary learning. Fullan (2000) notes that, in the 1960s, large scale education reform had failed partly because of implementation issues and the failure to address local institutions and cultures, while the later reform efforts of the 1990s had recognised more clearly the complexity of the task. In his study of three large scale reform efforts, Fullan (2000) identified a number of factors that could potentially contribute to successful reform. Significantly this included the notion of coherence-making. Drawing on King and Newman's (1999) work on alignment, Fullan recognised the disjointedness that can be caused when schools are faced with multiple uncoordinated innovations and policies. Obversely, fewer, selective, integrated and focused initiatives could result in greater coherence linked to successful outcomes at both a school and system level.

Understanding the complex nature of school systems

More recent understandings arising from complex systems theory shed further light on the failure of previous large scale reform efforts by providing insight into 'hidden' factors influencing systemic reform efforts. Complex systems science recognises the interdependence of parts of the system and the impact of networks of relationships within and between systems (<http://necsi.edu/>). The individual parts of a complex system cannot be understood in isolation. As their interdependencies may not be obvious, an intervention in one part of the complex system will have an (unlooked for) effect elsewhere (<http://necsi.edu/>, np). According to Bar-Yam (2011) many

different types of networks connect different parts of a complex system. The connected parts influence each other, to varying degrees, through their interactions. As Bar-Yam (2011) notes, "An important property of a network is its *topology*: which elements are directly connected to which others" (np). Four topographies are identified: centralised, decentralised, fragmented and distributed – each, in their own way, having a direct impact on communication and influence within the system.

The relevance of this complex systems thinking to large scale educational reform is well illustrated by Davis, Sumara and D'Amour (2012) in their study of three school districts in Alberta, Canada that had administered resources to improve learning. The study focused on the strategies and emphases used by each of the districts as these offered insights into the characteristics of each of the three complex systems (the school districts) as they adapted to the new learning. Importantly, while the three school districts were all implementing the same change there were significant differences between them in terms of their histories, and systemic cultures. The likelihood of the success of the learning intervention was strongly influenced by the network typology within each of the school districts. Their findings indicated that where the networks are centralised, if the centre fails to adapt, the whole system fails. Both distributed and fragmented networks did not provide the necessary communication connectivity and influence. A decentralised network, however, has many centres, reasonably efficient communication and reasonably robust structures – enabling considerable adaptability and flexibility. A school system's characteristic networks are therefore an important consideration in its learning and adaptation to changing environments.

As Davis, Sumara, and D'Amour (2012) conclude, the internal culture of the school district powerfully influences how the learning intervention is understood and implemented. With this knowledge, they argue that a great deal can be done on a structural level to ensure the types of associative networks that characterise the school district will support the learning. This suggests that there is a clear link to the likely success (or failure) of the intervention and the type of networks that characterise a particular complex system.

Adaptive leadership: The importance of context

The interesting question emerges of what kinds of practices may be appropriate for leading change in complex adaptive systems such as school systems. This can be considered in terms of both the leadership of those in formal leadership positions (such as the principal) and the process of leadership more generally.

If complex systems are adapting to their changing environments and seeking to make a difference through positive change, clearly context is important. Hackman and Wageman (2007) suggest that over the years leadership scholars have been asking the wrong questions. It is wrong, they suggest, to ask whether leaders make a difference, when the appropriate question is, "*under what conditions does leadership matter?*" (p. 43). This is the 'right' question because it distinguishes between "...those circumstances in which leaders' actions are highly consequential for system performance from those in which leaders' behaviors and decisions make essentially no difference" (p. 43). Dimmock (2012) notes that the concept of leadership "is complex, multi-dimensional and inseparable from the social and organisational context and conditions in which it operates" (p. 6). Furthermore, "[t]he key point that needs grasping is that under some conditions, leaders' actions do spell the difference between success and failure. But it is fallacious to believe that everyone in a leadership position is able, or even has the opportunity to make a constructive difference" (p. 8).

The growing pressure to improve the performance of schools, in recent years, has placed greater emphasis on the importance of effective school leadership. According to Owens and Valesky (2011) leadership needs to be adaptive. They note that in a world dominated by fast-paced change, "the school, and particularly the school leader, must be sensitive to emerging changes in the external environment that call for nimble, deft, rapid responses by the organisation" (p. 199). It is also important to note that school leaders face both technical and adaptive (or emergent) problems. The former may be resolved through the application of technical expertise while the latter are complex and the outcomes of any particular course of action cannot be predicted with any degree of certainty (Owens & Valesky, 2011). Heifetz, Grashow and Linsky (2009) identify the most common cause of failure in leadership is produced by treating adaptive challenges as if they were technical problems.

Finding the solution to an adaptive challenge such as the implementation of educational reform needs many people to be involved in the leadership process – that is adaptive leadership across the school and, by implication, across the school system. The leadership process may be facilitating change rather than providing answers. Heifetz, Grashow, and Linsky (2009) talk of adaptive leadership as a practice and not a theory, and a practice that can be displayed across the organisation. One example of this is parallel leadership (Andrews & Crowther, 2002) which may have a powerful effect on not only creating but also the sustainability of change (Crowther & Associates, 2011).

Alignment

Associated with the notion of coherence, is the concept of alignment: both between a system and its schools and within individual schools. Crowther, Andrews, Morgan, and O'Neill (2012) reported on research carried out in the Catholic education system in Sydney that provided insight into how a school system can work with its schools to improve student outcomes. The study showed that through data driven change, student outcomes had improved significantly. Importantly, the system had worked with the schools, providing mechanisms that supported the change. This seems to provide an example of the kind of paradigm shift described by Darling-Hammond (2010) which includes the assertion that school districts must "move beyond the array of ad hoc initiatives...[focusing instead on]...knowledge based systems that help build capacity in schools for doing work well...[and developing] their capacity to support successful change" (p. 271).

Crowther et al. (2012) found that sustained success in student achievement requires 'multiple leadership sources', encompassing system, school and developmental project leadership constructs and processes. The complexity of leadership is also recognised. This encompassed a combination of strategic, organisation-wide transformational, and educative leadership with leaders working mutualistically within and across the system. Teacher pedagogical leadership was also found to be vital for school success and the construct of Schoolwide Pedagogy (SWP) emerged from the research as a core variable in the transformation of student learning outcomes. Crowther et al. (2012) concluded that, for maximum effectiveness, system, project and school leaders must understand each other's values and priorities, negotiate common territory and then go to considerable lengths to demonstrate consistency and alignment. It is further contended that school success

is a mix of broadly defined student and teacher achievements; visionary systemic direction; school-system values alignment; umbrella pedagogical frameworks (SWP); school development as a durational journey; and multiple leadership sources. The Crowther et al. (2012) capacity building model captures these dynamics.

Capacity building

The concept of capacity building has gained increasing prominence in the school improvement literature. Drawing on Darling-Hammond (2010), Mitchell and Sackney (2016) contend that authentic teaching and learning requires an early and ongoing commitment to building professional capacity. Mitchell and Sackney (2016) found that in high capacity learning, schools' educational leadership emerged organically throughout the school. They see a set of leadership activities intended to align high quality educational practice towards the goal of improved student learning as central to leadership work. In this understanding of capacity building, school leaders take a collaborative, learning orientated approach to regulating, coordinating, expanding and protecting professional practice. The principals have the role of enabling, guiding and focusing teachers back to a sense of shared purpose, which is linked to the alignment of practice.

Crowther and Associates (2011) argue that capacity building and parallel leadership are the keys to sustaining school improvement. Sustainability relates to in-school alignment – school coherence where the development of a shared vision and schoolwide pedagogy enables people to work together – and distributed leadership. The Crowther et al. (2011) capacity building model provides insight into how a school can manage the balance between the requirements of the system and the way of working together developed in the school. Professional learning communities (PLCs) do not provide sustainable school wide change, as Andrews and Lewis (2002) found, a PLC in the school may have deep commitment to change, while other teachers were merely compliant for as long as it is necessary.

Sharrat and Fullan (2009) define capacity building fairly specifically as, "investment in the development of the knowledge, skills and competencies of individuals and groups to focus on assessment literacy and instructional effectiveness that leads to school improvement" (p. 5). They note that school districts have realised that capacity building is the key to successful school improvement (that is, improved student achievement) but argue that the actual goal is *realisation*, via systemic

capacity building. For Sharrat and Fullan, the key to systemic capacity building is knowledge building that is universally aligned and coherent – “knowledge building that emanates from centre and the field” (p. 5). Alignment of the district vision and shared school vision is an important part of this success.

Summary

Studies of school-system relationships are becoming more common in the field of school improvement; however, this focus is not evident in Australian studies. Evidence of the importance of both in-school alignment (coherence) for school improvement is well documented as well as in-school factors that build capacity for improvement. Less well researched and documented is school-system alignment (coherence) for ongoing (sustainable) improvement but acknowledged as important.

In an Australian study (Crowther et al., 2012), whilst the USQ-LRI researchers were considering the impact of a whole school improvement process on school outcomes (student learning), they did find as an indirect effect, the importance of quality school-system relationships.

This research study's intent was to extend the understanding of how schools use contextually relevant frameworks, structures and processes to support ongoing improvement as they respond to changing internal and external demands. In particular, the actions of leaders within the school and the system in enabling school and system coherence.

Research Design

The research was a qualitative study focusing on case studies of four schools. These schools had begun work on the teacher performance and development cycle, (see Figure 2), been involved with IDEAS resulting in the implementation of their contextual SWP and were incorporating aspects of their school-based priority goals. The study spanned two years and traced these schools as they 'actioned' their SWP and were able to define evidence of student improvement in literacy and/or numeracy.

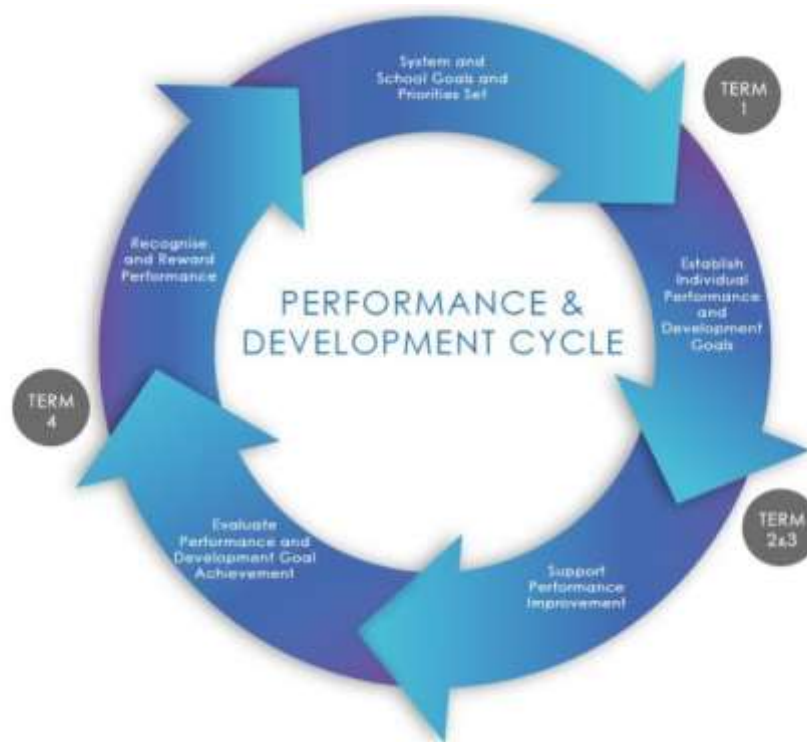


Figure 2: Teacher Performance & Development Cycle: School Review and Development (Archdiocese of Canberra and Goulburn, 2015)

Research Question

How do school leaders use their contextually created SWP and meta-thinking about organisational process to respond to school priority areas and system and government requirements regarding student improvement?

Schools were provided with five sub-questions to guide the data collection:

1. What processes emerge as authentic responses to implementation?
2. What evidence of impact can be collected and reported?
3. What leadership action emerges as effective action during the implementation process?
4. What explanation for sustained success(es) emerges from the preceding analysis?

Research Process

Evidence of improvement was obtained through school-based data which was guided by the researchers' definition for success.

'School success' is defined as enhanced school achievements in agreed high priority goal areas, based on documented evidence of those achievements

and teachers' expressed confidence in their school's capacity to sustain and extend those achievements into the future. (Andrews et al., 2009, p. 4)

The researchers tracked four schools over two years through group discussion, collection of artefacts and relevant school-based documentation. The process of data collection involved three phases over two years:

Phase 1 – A workshop was facilitated by CECG and USQ-LRI and was attended by the four schools: by using the SWP as a lens for implementation, schools were asked to use their identified priority focus to develop a Pedagogical-Operational-Managerial (POM) plan. Schools then mapped this into their Annual Improvement Plan (AIP). For some schools this initially created some confusion as their priority focus had been adopted for their Collaboration on School Achievement (COSA) project. However, through dialogue with the researchers, this enabled them to align their focus for improvement with the System priorities.

Phase 2 – A visit to each school was conducted by the research team (USQ-LRI and CECG School Services Senior Office) during and at the end of year 1 to track progress and discuss emerging evidence including semi-structured interviews and school documentation. An interim research report for the System was produced noting a thematic analysis of emerging themes (See Appendix 2).

Phase 3 – All schools delivered presentations at the end of year 2 to provide evidence of improvement (in attendance were an additional USQ-LRI researcher and an external critical friend both of whom had not been involved in the previous phases). Schools were provided with stimulus questions:

1. What processes emerge as authentic responses to implementation?
2. What evidence of impact can be collected and reported?
3. What leadership action emerges as effective action during the implementation process?
4. What explanation for sustained success(es) emerges from the preceding analysis?

Each school had or was developing an SWP at the beginning of the research project. Over the two years a researcher from each of USQ-LRI and CECG worked with each school, keeping the above as guidelines for focusing conversations toward their action plan. Each school was allocated one hour for their presentation which comprised the school's focus together with discussion stimulated by the

critical friend. Schools were also asked to produce copies of relevant documentation which might have included the following:

- Evidence of goals and how these were achieved – or not
- Student achievement data – particularly growth data
- COSA documentation
- Strategic plans/ annual improvement plan
- Photographs
- Student work
- Videos of teachers discussing practice
- Videos of students understanding and implementing goals/knowledge of the school vision/SWP/etc.
- Evidence of participation from parents/teachers in school events
- Evidence of improved teacher confidence and achievement, through their engagement/programs/writing/assessment
- Evidence of alignment in teachers' work-planning-implementation-assessment

Overall Impressions provided by the critical friend were:

1. All participants showed evidence of high level personal and professional reflection, including new ways of thinking about school development, and the meaning of teachers' work and the phenomenon of student learning.
2. The value of external critical friends (USQ-LRI) is highly regarded, especially in providing a framework and timeline targets and expectations in supporting the process.
3. Each 'journey' drew upon the [best of the] tradition of the school community, as well as the talents of its members, though some more than others, at least at this stage.

Data Analysis

The interim report with the emerging model (see Appendix 2) provided an image that enabled the researchers to capture the internal-school alignment and system-school alignment practices observed at that point in time (end of year 1).

After the school presentations at the end of the two-year research project each case study was compiled and used in an across-case study thematic analysis focusing on internal-school alignment and system-school alignment and the relationship between the two.

Three frameworks were used in response to the overall research question – Performance & Development Cycle (for teacher reflection) (see Figure 2), Framework for School Improvement (see Figure 1), and Linking Leadership & Capacity Building (see Appendix 3).

Case Studies

School A: “The Queens of Alignment”

Vision: Growing in excellence within a Christ-centred community.

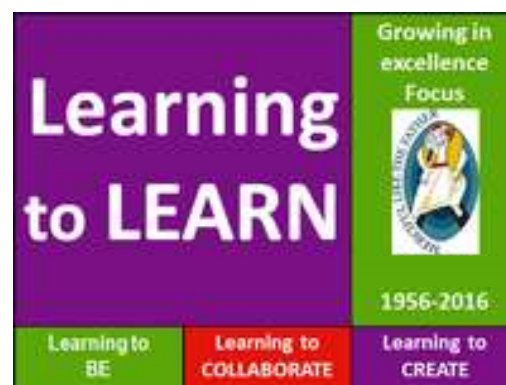
Schoolwide pedagogical principles

Learning to learn.

Learning to be.

Learning to collaborate.

Learning to create.



School A is a co-educational Catholic Primary School set amongst an array of magnificent trees that symbolise strength, shelter, support and sustainability. The tree is embraced as the school symbol and connection with their patron saint and as a representation of the spirit that is the school and its community. The regional Early Learning Centre (ELC) draws students from a variety of surrounding suburbs. With the ELC the school caters for students from Preschool to Year 6 and has an enrolment of 213 primary and 60 pre-school students (2015). Enrolments have increased over the last 3 years.

During 2014/2015 significant time was spent on big picture thinking, action research and whole school refurbishment. Much of this work was undertaken by the principal and the assistant principal, however they realised that staff were as yet not engaged with changes and future thinking. The principal and assistant principal were aligned in their thinking, however their staff were not with them in terms of pedagogy for the 21st century classroom. They realised they had to stop, and take stock of understandings of teachers and parents. They were juggling anxious parents, staff complications and the needs of students. Much time was spent “putting out fires”. The principal was dealing with most of this but with the assistant

principal was able to work on the real purpose of the school. This purpose revealed itself in their work on the development of the Schoolwide Pedagogy, the COSA+ project and their own action research. They saw they needed to ensure 21st century learning in all classrooms. One strategy involved partnering of teachers with a skilled teacher in a defined area. The principal recognising her own limitations deliberately sought someone to partner the school in the development of 21st century learning. Interestingly, even after they had put structures and processes in place, they recognised that there was no evidence of change in student learning. The System requirements were there, but the teachers were not taking responsibility and were overburdened.

Over time, the principal and assistant principal understood that they needed to be more inclusive in their leadership. They set about redesigning school structures that enabled collaboration. This began to bring people together. They spent much time talking about processes, led parent education, staff meetings and introduced peer coaching. They collaborated on a process for growth. Teachers began to recognise they needed to grow, because at the same time the principal and the assistant principal were building an open culture enabling this to happen.

Case study A is an example of rich growth in leadership and real success in student learning and teacher understandings.

The structural process focused on:

- Time. Structuring the teaching day to allow for collaboration of staff as well as timing collaborative discussions to align with, or not clash with, other school/System agendas
- Relationships. Collaborative discussion between teachers enabled more dialogue and debate about teaching and learning. This in turn led to change which actually was in response to the needs of teachers.
- Artefacts. The leadership team began to play with ideas of colour and visual representations of their school. Three colours were chosen (purple, green and red) which symbolised the contemporary environment they were building. These colours have become recognisable and support the identity of the school.

The principal and the assistant principal recognised they had to have a scaffold enabling the development of skills, they had to think through processes for bringing parents along with them. The approach was very strategic and throughout the journey there is evidence of enormous cultural and relationship building. The principal and the assistant principal complemented each other, worked with each other's strengths and had enormous respect for each other. This is an excellent example of parallel leadership.

This approach could also be said to be organic – the teachers grew in skill and confidence in both their teaching and their relationships with parents over time. For example, a recent parent evening, held to inform parents of a new school structure one week before the end of the school year, revealed how confident staff were in the school, their own teaching abilities and their principal. They stood united in the changes to be made. This demonstrated to the principal that she had developed professional competence in herself and her staff. Another example of this was when the school held a learning celebration where teachers proudly exposed what they were doing in the classrooms to their parents and peers. This would not have happened if staff had not been confident in themselves or their abilities.

Case study process at School A

School A could be seen to have had three stages of learning over a six-year period:

1. **Taking Stock.** In the early days there were anxious parents. Both the principal and the assistant principal were new to the school and were aware that they needed to grow with the school. There was a talented multifaceted staff that had no common education dialogue or language. The principal realised that servant leadership was happening. There was a sense the community perceived that the principal and assistant principal had to do it for the school. Once a strategic approach was discussed and developed it assisted them in the journey. They realised that structures were essential. This gave birth to a project they called, The Seeds of Growth. In the beginning there was no evidence of growth and change in teachers or students. Teachers were doing stuff, but there was no evidence of improvement. Too many elements and nothing going on. Too many words. Finally, the 'ah ha' moment came.

2. **The Awakening.** The principal and assistant principal came to understand what was really needed, and this was a shift. They had not realised how teachers felt. Once this happened they adjusted their strategy and:
- a. Focused on alignment within the school –
data/planning/programs/assessment/evidence of growth;
 - b. Upskilled parents- provided workshops in response to their needs;
 - c. Increased consultation with teachers and parents;
 - d. Took increased risks – let things drift awhile – but, not for too long. They realised that staff needed to live the experiences. Staff became more relaxed;
 - e. Developed peer coaching strategies; and
 - f. Implemented a celebration of learning by every teacher.

Once the principal and the assistant principal loosened their grip on expectations, confidence grew amongst teachers. They became conscious of aligning and deepening knowledge not adding more 'things'. They realised teachers need to do think about their teaching for themselves.

3. **Stand up and be accountable.** Evidence of strong foundations were put to the test. Teachers grew to be open and honest in providing unsolicited support for the principal when parents were challenging the school. The celebration of learning is another example of teacher confidence in their own self-worth and abilities. This illustration of the open and honest culture in action is paying dividends.

Evidence of improvement

All schools participate in the Catholic Education Educational Performance and Reporting Toolkit known as ePART. It is a web-based application that captures data on literacy and numeracy diagnostic assessment from Kindergarten to Year 6 through the CE intranet. The information collected represents a system-wide approach to analysing and reporting literacy and numeracy achievement and progress of students.

In case study A the following was evident:

- ePART results for improved reading in Kindergarten (see Appendix 4).

- NAPLAN results showed good achievement and growth over the last 2 years in Reading with students who were in year 3 in 2013 and year 5 in 2015. Numeracy results were also good in both achievement and growth.
- Peer coaching began resulting in increased teacher sharing and professional learning.
- Professional Learning communities as part of new structures allowed for increased dialogue and alignment of priorities.
- Annual Improvement plans and strategic plans were coded to ensure alignment with school and System priorities.
- The focus on improvement was highlighted and 'skinny'. The goals were realistic.
- Celebration of learning in classrooms was opened to parents.
- At a recent parent meeting teachers vocally and publically supported the principal.

School B: "We're not about to name the future, but the way we are heading is clear"

Vision: A school with a view

Schoolwide Pedagogical principles

- a view to creative and critical thinkers,
- a view to developing the relationship with God and one another, and
- a view to lifelong learning.



School B is a co-educational Catholic Primary School in NSW with seven classes from Kindergarten to Year 6. The School Vision 'School with a View' directs thinking, planning and teaching and creates the focus toward providing quality Catholic education. The principles underpinning the Vision focus staff toward developing key attributes of learners for today and the future, as well as growing a community of learners working in partnership and developing positive relationships with one another and with others beyond the school.

The process of developing the Vision and Schoolwide Pedagogy was led by a well-respected, long-standing senior teacher who worked with the principal and facilitated workshops with the whole staff. As the school was small, they were able to use existing staff meeting time to conduct workshops. The resultant Vision and Schoolwide Pedagogy was a strong statement of where they wanted to be in the future and how they would work together to move the school forward.

This school had a change in leadership during the research project, so the researchers focused on the new leadership and what would transpire at the school as a result of this. The previous principal had prioritised the development of IDEAS over time. There had been teacher growth in pedagogical understandings over time, and processes had been sustained, so to examine future student achievement based on these understandings seemed a natural course of action.

The previous long standing principal dedicated time to ensuring the culture of the school was grounded in supporting teachers' relational and faith development. Staff developed a "view" which began with the view from the mountain to the sea, as depicted in the image. This supported the culture building focus where the idea of the view was expanded into the view of teaching and the view of learning. There was visual representation of artefacts in colour including signs, language by students and teachers, and awards. There was a strong focus on being strategic and this is reflected in their documentation. There was a focus on the Australian Professional Standards for Teachers (APST) and trust in the teachers and what they did. Teachers felt recognised and respected. Requirements from the System were integrated into the normal business of the school. Nothing was an impost because the alignment of system and school was clearly evident.

One of the teachers commented that "just because we live here doesn't mean we have to be in the dark ages". This demonstrates how powerful teacher voice is in this school and shows there is vibrancy amongst the staff. At almost every school visit the principal gave the researchers a tour whilst talking animatedly about their success. The new principal has recognised the work the staff have done and said she is not about to name the future, but is clear to share where they are heading. She can see that the school's vision is not the principal's vision, it was created and is lived by all. She is able to see scope for deepening different perspectives from many of the long

standing teachers, older and younger students and will work with the already successful COSA model. There is still work to be done and the journey continues. In school B both the long standing principal and the new principal used the expertise of staff. This is another example of parallel leadership in action. The school demonstrated sustained whole staff involvement over time in processes for improvement led by the principal who really believed in staff and really trusted them. Trust was enhanced because teachers knew they were listened to and included in professional dialogue. The long standing principal retired in 2015, and since then the new principal has taken the legacy forward, recognising and acknowledging the journey of growth and development. She is building on the work previously achieved, recognising their growth and adding value to their efforts.

In this case study, there were examples of modelling, sharing and engagement of whole staff from the beginning of the study. A collective responsibility had been achieved and interviews with students showed there was a clear understanding across the school. Staff had articulated a direction and language to match that direction.

The principal and staff realised that the journey they were on was long, but that it had to have an impact on student learning. This is where the focus will be in the future.

Evidence of improvement

In case study B the following was evident:

- ePART results for improved reading in Kindergarten (see Appendix 4).
- COSA data showed good growth for students in kindergarten, year one and two over a semester period with reading. Every child improved.
https://drive.google.com/drive/u/1/folders/0B-2lBxqxp_NFdU5nZ3pBQzZhczQ.
- Increased staff engagement with school improvement strategies. The journey continues.
- Responsibility of all staff has led to ownership. Collective responsibility for whole school improvement is growing.
- Awards and other artefacts have been developed and celebrated.
- A Core curriculum document was produced based on the vision for pedagogy.

School C: "We are not paddling in our pond alone"

Vision:

A vibrant, welcoming community. With Christ as the centre, we strive to develop the full potential of every person.

Schoolwide pedagogy:

Build, Belong, Become, Believe



School C is a Catholic Systemic Co-educational School located in the inner south of ACT. It is part of a combined parish and caters for students from Kindergarten to Year 6. It has a current enrolment of 191 students (2015).

The Vision Statement is central to the Catholic ethos and is manifested in right relationships: "a vibrant, welcoming community. With Christ as the centre, we strive to develop the full potential of every person".

During the course of 2015, the school worked towards developing a Schoolwide Pedagogy based on its Vision Logo: "Build, Belong, Become, Believe" and the Archdiocesan "Principles of Pedagogy" document. Continuing to focus on Mathematics through the Collaborating on Student Achievement (COSA) joint initiative with the System. There was a particular focus on the implementation of the Mathematics Framework and the Learning Assessment Framework (LAF), two major areas of professional development for staff.

The principal in School C also worked in a parallel leadership model. The principal focused on allowing people to take the lead. She trusted them. It was important for her to have a school emblem and she set about culture building through symbolism and meaning making. The processes of perseverance and commitment (like the school's patron saint) were visible.

The principal was building a culture of inclusivity, adding value by valuing the individual and their sense of worth. This is an example of a real sense of moral

purpose. She enabled others to step into the lead and affirmed others in the journey. Self-worth was individualised. The principal used the system for support, did lots of mapping and acknowledged people in the System's Registration process. A video was produced and is an example of people stepping up to the mark.

This school began the IDEAS project in 2011, but to ensure clarity and deep understandings, processes were repeated several times. Using the customs of the school founders, the Mercy sisters, there were many hours spent reminiscing and capturing traditions. Three years were needed in grounding the Vision with staff, parents and students. Out of this process came the 4Bs of teaching and the 4Bs of learning. Values also emerged, all of which aligned well with System initiatives.

Teachers spent many meetings working through pedagogical understandings, processing what was discussed and analysing the impact on the students. Staff moved from a teaching framework to a learning framework. COSA bingo was designed. If proposals did not align with the COSA bingo, then they were not implemented. The school underwent their five yearly registration process in 2016. This revealed that they were "not paddling in the pond alone", they supported each other in the school and received support from the System.

The principal and the leadership team realised that it was worth spending time on the development of the vision and culture building. This time was well spent and the results have been successful. Staff became more confident in their abilities and increasingly able to determine the direction of the school. There became a sense of 'things that fit into the school were championed' and 'those that didn't, did not go ahead'. Discussion revealed a richness in engaging all the community resulting in, values and pedagogical thinking that were teased out well. Going really slowly captured the traditions and gave people a sense of belonging.

Staff were able to develop a vision and a 4Bs SWP framework. These together were used strategically to determine the 'best fit' for initiatives at the school. Again, the principal enabled staff. The assistant principal engaged in the cognitive and the principal in the artefacts. This is another example of the principal having a high level of trust in her staff and with her assistant principal in particular.

Evidence of improvement

- ePART results for improved reading in Kindergarten (see Appendix 4).
- COSA data detailing improvement over time:
https://drive.google.com/drive/u/1/folders/0B-2lBxqxp_NFbmxNU3A5bjZTMmc.
- Language was about “adding value” not added work.
- Teachers wanted to talk about their process and the journey of teaching and learning.
- Tangible evidence in the teaching and learning framework.
- The vision is grounded and stands up to scrutiny.
- New staff find it easy to assimilate into the school.
- There is slow growth rather than a staged process, the journey has just begun.
- The student video demonstrated embedded thinking.

School D: “Together we go!”

Vision: Our School is a Christ-centred community, striving for excellence in the Dominican Spirit.



Schoolwide Pedagogical principles

Together we do our BEST

- **Believe:** We live our Catholic faith through action, attitude and prayer guided by the Dominican Tradition.
- **Explore:** Through inquiry based learning we acquire the skills to become critical thinkers who are flexible, creative lifelong learners.
- **Strive:** We accept challenges with resilience and confidence.
- **Triumph:** We develop wholistically in a supportive, positive and collaborative environment and celebrate our achievements.

School D is a Catholic Primary School located in the northern suburbs of ACT. The school provides a challenging and comprehensive education for students from Kindergarten to Year 6, within an atmosphere permeated by gospel values. Through its defining culture, its curriculum and Religious Education studies, the school aims to foster in individuals a rich relationship with God. The community is proud of their rich history and strive to keep the Dominican spirit alive. The school motto *Veritas* (Truth) is reflected and promoted in all school activities and experiences.

This school began the IDEAS project in 2014, with a real focus on it in 2015 to align the school's Vision to agreed pedagogical principles – Together we do our BEST: Believe, Explore, Strive, Triumph. Professional learning and development were also key areas of focus with an emphasis on improving teacher understanding of the writing process and using student assessment data to inform teaching and learning in Mathematics. Staff continued to ensure the teacher mentoring program was rigorous, supportive and reflective, and built the professional capacity of teachers to improve student outcomes.

The principal recognised that the process of renewal is ongoing and ensured structures were in place for this to happen successfully. Professional learning of staff was carefully planned and mapped against System documentation. The principal set up and developed professional learning communities. In School D there was a strong focus on structures. This worked well for this principal and fitted well with the Dominican charism of BEST. Once a structure was in place the unfolding happened. Once the process had been developed and understandings deepened within the staff, there was a focus on the “brand” of the school. “Together we do our best” has become the catchcry that all have taken on board. The principal has been strategic in building structures and visual images that also deepened into a pedagogical understanding. People built the process, they are trusted and celebrated and are continuing to create the story.

Furthermore, the principal engaged an artist who for the 50th school anniversary painted a giant outdoor mural. The mural is multilayered in meaning and it is unpacked with purpose. The 50-year celebrations provided the impetus and the mural was the foundation. The focus then widened. All the structures in the world need action. The principal realised staff needed more than just her. She transformed

her own thinking and was able to take the school forward in pedagogical understandings.

Evidence of improvement

In case study D the following was evident:

- ePART results for improved reading in Kindergarten (see Appendix 4).
- COSA video presentation
<https://drive.google.com/drive/u/1/folders/0B7OkstDmvjvcajVrZlpEaV94Yzg>.
- Student improvement data through SENA and LAF assessment.
- Professional learning communities are being developed.
- Use of artefacts for branding was established.
- The annual improvement plan is mapped to their vision.
- Photo wall depicts the vision weekly.
- Mural celebrates the traditions of the school over 50 years.

Evidence of AIP mapped to the Vision

School IDEAS Project

TOGETHER WE DO OUR BEST | DRIVE | EXPLORE | STRIVE | TRIUMPH

2015 ANNUAL IMPROVEMENT PLAN

ISR Focus Area	ISR Element	Targets
1. Religious Identity and Culture	B E S T	To continue the IDEAS process for review Vision statement in order to ensure: <ul style="list-style-type: none"> • the vision and mission of the school • the school's commitment to all aspects of Catholic life and culture.
2. Faith Formation and Prayer	B E S T	To implementation the newly formed Principals for Learning, "Be Strive and Triumph" to ensure: <ul style="list-style-type: none"> • staff, students and parents are engaged in understanding and living person, vision and teaching of Jesus the life of the school • shared responsibility across the school the use of a common language

ISR Focus Area	ISR Element	Targets
1. Religious Identity and Culture	Catholic religious identity	To continue the IDEAS Vision statement in order to ensure: <ul style="list-style-type: none"> • the vision and mission of the school • the school's commitment to all aspects of Catholic life and culture.
2. Faith Formation and Prayer	Person, vision and teaching of Jesus	To implementation the newly formed Principals for Learning, "Be Strive and Triumph" to ensure: <ul style="list-style-type: none"> • staff, students and parents are engaged in understanding and living person, vision and teaching of Jesus the life of the school • shared responsibility across the school the use of a common language

Synthesis of Cases

During the two year study all schools were able to demonstrate an increase in teacher skills in either literacy or numeracy and an increase in teacher self-confidence in these areas. This was evidenced through their COSA data, dialogue,

the quality of their discussions and their ability to share professional learning. In all instances the schools began warily on the journey, not knowing how it would challenge them and where it would lead them. All schools reached blocks along the way and all schools reached their own 'ah ha' moments. When these moments of the real day-to-day grind and thoughts and feelings of teachers reached the principals, a reimagining of the focus had to be designed. All schools had to experience these moments for themselves, and all had to experience their own journey. This process of renewal, enhanced understandings of pedagogy and the balance between System initiatives and school improvement in all cases was successful in terms of increasing teacher quality (refer to Figure 2 used as an analysis lens).

All schools were in the beginning stages of transferring this new knowledge of teachers into enhanced student achievement which was guided by the school's increased capacity about how to use data for forward planning. One school reported that the structure of professional learning communities had been enhanced through confident professionals, collecting data, spending time together to analyse the data and make judgements about the location of students within a band level. The road to this outcome is now better understood in these four schools and the student achievement data is continuing to grow.

Each school identified priority areas focused on improving student learning outcomes in literacy and/or numeracy. Projects were adopted as best practice strategies for responding to System requirements. For example, all schools used COSA to enable teachers to collaborate and learn together to enhance teacher quality delivery.

In all cases the principals established a trusting relationship with significant others, that is other members of the administrative team or teachers of respect amongst colleagues. Principals realised that if there was to be overall improved school outcomes, then teachers needed to share a common purpose, and be integrally engaged in designing and implementing processes and plans. All reported that the time spent in developing a shared language of pedagogy (specifically the SWP framework) enabled deep dialogue which resulted in increased confidence in

teachers being better able to talk to each other, to support each other and share in relevant professional learning.

Each school changed direction as the need arose. They all established clear visioning that aligned with the System priorities and were able to take on board any requirements because they were able to see alignment and purpose in the journey. In all cases the System requirements were seen as an opportunity provided for them to focus, and not, as often perceived, annoying busy work. The System focus on skinny goals (maximum of 3 per school), providing time (\$) for teachers to collaborate on analysis of their work informed by data, enabled the positive outcome of clear alignment between school and System.

Outcomes

Within-school alignment

Findings of this research study indicate several factors crucial to enhancing school improvement within the school: a mindset for ongoing improvement; development of trusting relationships; and principal leadership (Figure 3).

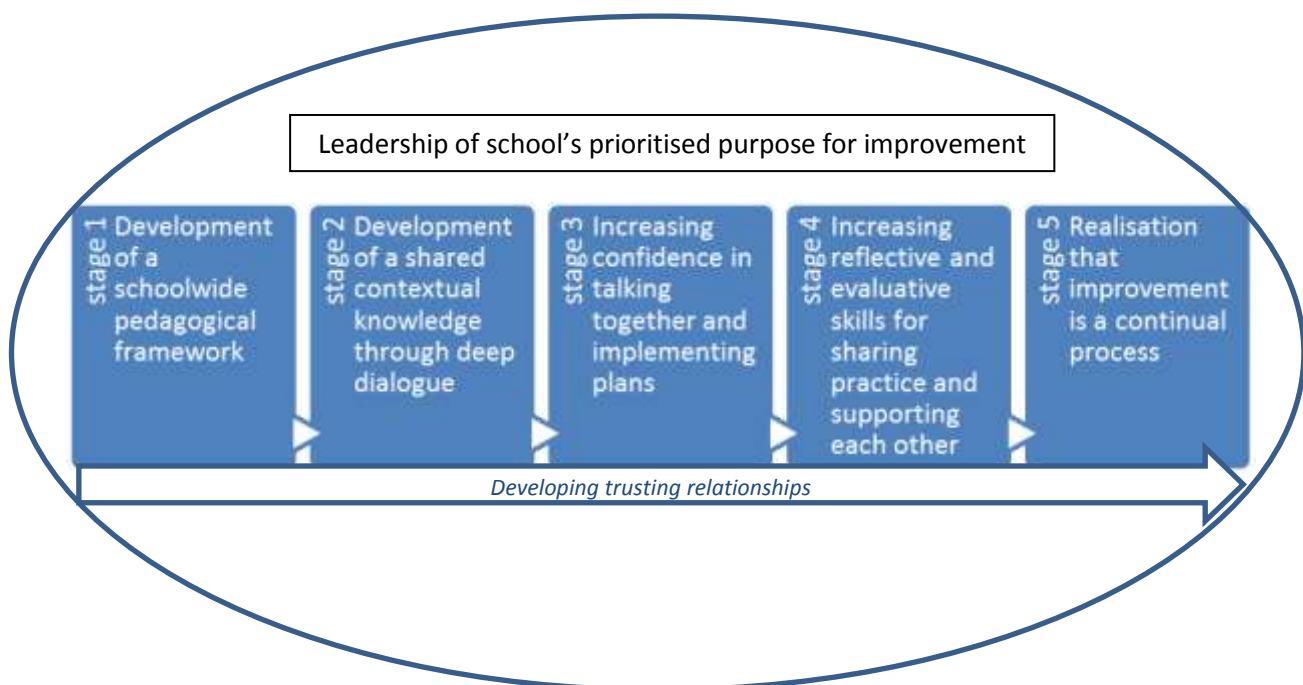


Figure 3: Within-School Alignment

Thus, it is proposed that within-school alignment requires:

- context sensitivity;
- an ongoing process for developing teacher capacity for ongoing improvement;
- focus on the school's priority for improvement; and
- enabling processes and structures by the principal working in conjunction with teacher leader(s).

Context matters

The four schools in the study were located in different environments, each with their own clientele, needs and demands from parents and students. Requirements from the System were the same. The processes facilitated by the research team and actioned by the principal in each case were very diverse. In every case the schools responded to their own needs in ways to suit their own contexts. Timing of workshops and meetings were different, the thinking and motivation of teachers was different, and where the principal was in their own career journey was different. The principal's own thinking and career journey proved to be a determining factor in all cases in terms of the school priorities, involvement of others, and development of the process. This is represented in Figure 4, indicating the balancing act between the structures needed in the school to enable improvement and the relationships that exist in every school.

Figure 4 illustrates two crucial components in each school context: the structures, that is, the way the school day is organised to ensure teacher collaboration and professional conversations; and the artefacts, that is, the bulletin boards, posters, stationary and awards. These structures are balanced between the relationships amongst staff and the CECG COSA support officer. The development of in-school processes in terms of who is working with whom, how peer observations and mentoring processes are conducted to enable trust, and criteria regarding how conversations are constructed are other determining factors. These schools all worked through processes in a trusting environment where there was a common language of learning and achievement that was at the forefront and teachers were comfortable with each other. The balance between the structures put in place by the leadership team with CECG support and the relationships developed by leaders and teachers and CECG COSA officers, including processes, language and trust

development were observed in every school. The researchers noted that when these two components were visibly obvious and part of the normal day-to-day workings of the school, the school was more likely to succeed in school improvement.

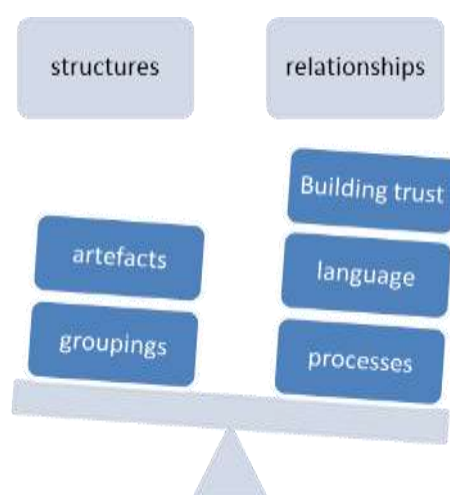


Figure 4: Structural and Relational Balance Enabling School Improvement

Ongoing improvement

All schools have evidence to demonstrate a mindset for ongoing improvement. Each school's engagement with IDEAS has developed a way of working – providing the leader with a process for improvement. Therefore, new demands were not seen as additional “things we have to do” but rather projects that could value add. For example, using COSA strategies enhanced the frameworks already in place. The culture that had been developed grew teacher confidence in finding ways to address issues related to student learning. This culture enabled capacity building in teachers that was value added through systems initiatives, such as time; teacher performance and development processes; and specialised projects that upskilled teachers' pedagogical practices.

Trust

All schools in the case studies were able to bring their staff with them by gaining trust through listening, professional dialogue and debate. Any processes, strategies or procedures about student learning that were negotiated and discussed were more likely to engender interest and engagement from staff. In all schools there was a sense of teachers connecting, and engaging in improving student outcomes. Most teachers were very dedicated, when they were trusted, they responded and

responded beyond the call of duty. They felt invigorated after they reached a Vision, and generally wanted 21st century learning happening in their classrooms based on good pedagogical principles. Without trust this does not happen.

Leadership

All schools found that cohesion between the school improvement team which included the principal in all cases was vital to sustaining a mindset for improvement. The principal must be involved in processes. Evidence of principal leadership in the study is listed below:

1. All principals in the study built trust within a culture that valued the opinions of teachers. Engagement of teachers increased when they were trusted. This in turn enabled them to look into their thinking and practice and not be content with mediocrity. The principals, through using data and relevant professional learning enabled teachers to critically review current practice and subsequently raise expectations for student achievement.
2. Through the creation of a Vision, Values and Schoolwide Pedagogical Framework, the principal was able to develop an explicit articulation of school identity. Each school did this in their own particular way, however the visibility and authenticity of this identity was clearly evident both in visible imagery, documentation and practice. All schools developed a meta-language for learning and practice. This was evident through the use of school awards, badges, banners and publications.
3. In all cases leadership reflecting relational trust between the principal and/or executive and teacher leaders was clearly evident. This way of working once established continues to build on school improvement over a longer period of time, however should this relational trust be broken by a change in principal or personnel without an induction process ensuring that incoming personnel will add value to the internal processes, the gains could be lost. One school reflected a concern about the possibility of this situation occurring, however was able to account for improvement through detailed processes in discussions with the new principal. In this case the principal has continued to build on the vision, adopt the learnings and take the school forward as expected.

System-School Alignment

All schools in the study made the decision to come on board with the IDEAS project of their own choice. The principals could see this as an opportunity to bring together their variety of projects being implemented in the school and provide a whole school platform of improvement. All together with one agenda: agreed practices and understandings of pedagogy, led to improved teacher capacity and outcomes for students.

All schools responded well to targeted support through the COSA processes. However, the crucial factor for the System is to note the context of the school, and to have the discussions and respond to the principal. Rather than diagnose and prescribe to schools, the relationship requires connecting and collaborating together in a way that includes the AIP and the ISR reports.

The internal school review (ISR) is an evaluative process for regular reflection and review of a school. This process works well if it is coordinated by the school leadership team with input from staff and members of the community. The decisions made regarding school improvement must be based on evidence as determined by individual schools and teacher judgements about the school's capacity in the 10 inter-related domains of the National Improvement Tool (Masters, 2012).

The understanding that has emerged from this study as captured in Figure 5 revealed that alignment between systems and schools is dependent upon the relationship between the principals and their system support officers. Where the system has developed accountability frameworks such as the School Improvement Framework (see Figure 1) and the Performance & Development Cycle (see Figure 2), along with system priority projects (such as COSA) that appear to be complex from the school's perspective, there is heightened need for collaborative leadership between the system and the school.

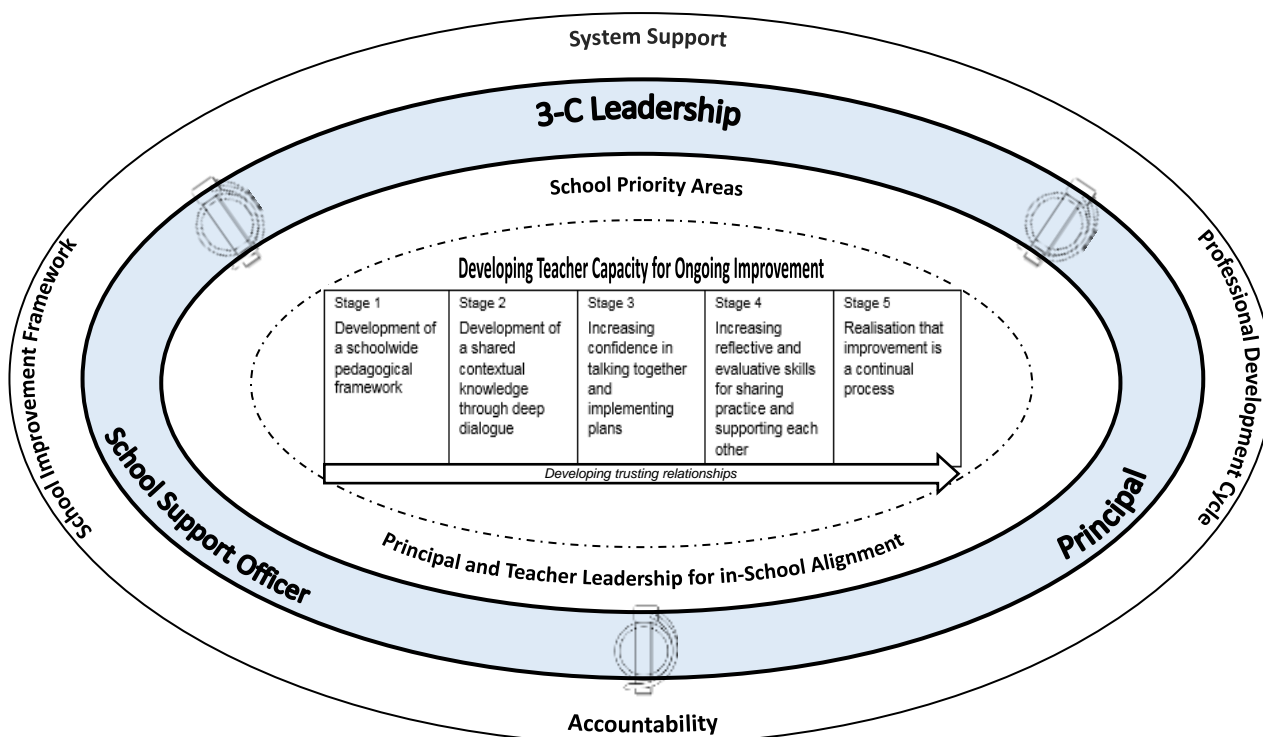


Figure 5: 3-C Leadership for System-School Alignment

Thus, a vital component is for the system officers and the principals to work through the messiness together to determine the aligned priority that is achievable in the school's context. System-School Alignment (or coherence) refers to the inter-relationship between the organisational structures and the processes of achieving cognitive consensus involving the organisation's members. Cognitive consensus is the engagement in collective thinking to develop agreed goals,

Leadership for system-school alignment is conceptualised as an inter-related action between the principal and relevant system school-support personnel. Leadership provides the linchpin for system-school alignment and is actioned through 3-Cs of leadership – Collaborative, Contextual, Collegial.

Such 3-C leadership provides the linchpin between system and school responsiveness to be accountable for meeting system requirements and in-school challenges. Each “C” represents the action of leadership:

Collaborative – working with others who share a common language to jointly achieve a shared purpose.

Contextual – tailored support sensitive to individual needs, organisational complexity and cultural nuances.

Collegial – reciprocal relationships based on mutual trust, empathy and appreciative perception.

Recommendations for CECG

1. Outcomes of the research reveal that the System has adequate frameworks and structures in place at school level. However, the effectiveness of these depends on building and sustaining relationships between the principal and the relevant System personnel. Collaboration should be continued; however, conversations could be more targeted with the principal leading school improvement based on ISR and AIP. The context of schools must be highlighted and considered in terms of CECG structures and funding to support collegial relationships. Once these three components of leadership are in place, schools will be prepared for future improvement.

Recommendation:

That the System continue to support the schools by adopting the '3-C Leadership for System-School Alignment' model.

2. In all cases the principals were hungry for knowledge and had a real desire to support their teaching staff to improve their skills and understandings. However, in all cases the principal was also on a personal journey of growth and development, and this meant that they were initially cautious in their approach to leading pedagogical growth in their school. It might be concluded that they did not feel confident being educative as evidenced by their measured approach to adopting new ways of thinking about pedagogy.

Recommendation:

That the System consider the worth of facilitating ways of supporting principals in developing pedagogical understandings.

3. Further, the research study revealed data about the way principals, leadership teams and teachers work in schools on a day-to-day basis. The

schools in the study developed a Vision, then a set of principles for Schoolwide Pedagogy (SWP). Once this was established and agreed upon, practices were put in place. It was a natural progression to align System requirements to school management and development. Thus, CECG requirements were not an impost, rather a support for what schools had prioritised for themselves.

Recommendation:

That schools develop a Vision that includes the growth of teachers' shared pedagogical understandings.

4. Schools are conducting internal school reviews and developing AIPs based on findings of these reviews. The CECG support officers continue to focus on supporting the implementation of the AIPs designed by school staff to support school improvement. This requires a systemic articulation of how service areas work together. Processes between the schools and CECG require clarity. It is suggested that the role of the school-support officer be with structures and organisation within the school and the role of the COSA officer be in support of developing pedagogical understandings of principals and teachers.

Recommendation:

That the processes (e.g. COSA) for CECG officers supporting schools be aligned with internal school review (ISR) recommendations as derived by school staff and supported by the principal. To enable this to occur, the processes for connection of schools to CECG must be clearly articulated.

5. Schools are increasingly taking control of their own improvement, through the AIP and COSA inquiry and therefore, should be able to show evidence of improvement related to their priority goals. It is recommended principals take control of their priorities, determine them within a time frame and be accountable for them.

Recommendation:

That schools be accountable to the System for improvement data related to the School's priority goals.

Conclusion

The Catholic Education Archdiocese of Canberra Goulburn Education System has developed frameworks and tools for school improvement. This research has identified the importance of system-school leadership in contributing to alignment of these system initiatives in school contexts. The linchpin enabling this action is the 3-Cs of leadership – collaborative, contextual and collegial.

Within-school alignment has been enabled by a school developing a clear school purpose to focus professional learning on what matters within that context. For this study, schools selected had engaged with IDEAS and developed a Schoolwide Pedagogical (SWP) Framework. This framework provided a common learning and achievement language for pedagogical action across the school and facilitated the embedding of specific action (e.g. literacy, numeracy) in response to the school's particular identified needs. Such thinking (cognitive consensus) and action of teachers led by the principal with the teacher leader(s) has resulted in positive, accountable outcomes.

This research reveals that schools can effectively respond to the increasing complexity in an era of accountability if they have developed processes and focused strategies for within-school alignment. Such processes and strategies include a clearly articulated school wide development of long term aspirational goals, short term action related to priority needs, and professional learning that focuses on pedagogy. The actioning of agreed purpose relates to leadership of a mutualistic relationship between the principal and teacher leaders.

This study concludes that there is a high level of trust required in the establishment and sustainability of the System-School relationship. It is imperative that the System be sensitive to the contextual factors of the School; the School develop rigorous processes for building teachers' pedagogical capacity; and the School be accountable to System requirements framed by the School's priority areas. Further, the relational balance between the Principal and the relevant System personnel together acknowledge the value-addedness of System initiatives for within school capacity. It is posed that this model of Leadership for System-School Alignment is the key to ongoing sustainability for school improvement. To date it has provided, within

a system, flexibility for the principal to meet in-school needs as well as respond to external demands. The high level of relational trust (Bryk & Schneider, 2003) demonstrated in these case studies indicates the importance of this way of working within a complex system that is CECG.

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Appendices

Appendix 1: Pedagogical, Operational and Management Plan (POM) by School A

'POM' PLAN

To improve teacher efficacy through SWP

	What and Who	How	Monitoring/Evaluation
Pedagogical 2014	<ul style="list-style-type: none"> * Critique staff meeting times and staff meeting foci to develop an understanding of SWP in the context of school and system priorities. * Align COSA+ project with School Action Research and SWP. 	<ul style="list-style-type: none"> * Explore the possibilities of longer staff meetings. * Focus on one of the four SWP across the four terms of the year. * Take a multilayered approach to staff meetings and professional learning. * Annual Improvement Plan. 	<ul style="list-style-type: none"> * Evaluation Staff Meeting at the end of every term.
	<ul style="list-style-type: none"> * Whole staff and Leadership Team 		
Pedagogical 2015			
Operational 2014	<ul style="list-style-type: none"> * Implement Learning Walks where teachers are encouraged to identify evidence of SWP across the school. * Report back to staff to share evidence of SWP. * Peer Coaching on one of the SWP. * POD coaching based on Action Research and applied to SWP. 	<ul style="list-style-type: none"> * The Learning Walk begins with a pre-walk discussion to ensure participants have an understanding of the protocols, purpose and focus of the walk. Participants observe and take notes on any evidence that links to the SWP. Participants consider any wonderings, summaries or patterns that may then be formulated based on the evidence. Be ready to share your evidence, wonderings or patterns at the week 	<ul style="list-style-type: none"> * Staff feed back at the Evaluation Staff in Week 10 of Term Three.

	* Assistant Principal to lead, all staff to participate	Ten Evaluation Staff Meeting. * POD Coaching will be developed around individual Action Research questions and the Classroom Continuum.	
Operational 2015			
Managerial 2014	* Community, (teachers, parents and students) to complete the IDEAS survey. * An evening of Showcasing Action Research to the community and other guests.	* A link to the IDEAS survey to go into the newsletter for the last for weeks of Term Three. Teachers to complete the survey. Year 4, 5 and 6 to complete the survey. * Individual invitations for "Showcasing Excellence" to go out to parents, CECG-COSA Coordinators.	*IDEAS Report * Feedback from "Showcasing Excellence"
	*All community members to complete the survey and are to be invited to the Show Case.		
Managerial 2015			

Appendix 2: Interim Report to CGCS



Catholic Education Archdiocese of Canberra Goulburn and University of Southern Queensland A Joint Research Project

Leading actioning of Schoolwide Pedagogy (SWP) – the impact on teacher quality and student learning.

Background

This research project aimed to trace the implementation of a school-based contextual specific pedagogical approach to teaching and learning (SWP) in a school defined priority area for improvement. The study will also explore how school leaders use their SWP and meta-thinking to respond authentically to school, system and broader government requirements.

The participant schools were School A, School B, School C and School D. Each of these schools had been engaged in a whole school improvement project (IDEAS) and had developed an organisational framework for ongoing improvement. That is a vision, values and schoolwide pedagogical statement. School B had engaged in IDEAS in 2008 as part of a special project. The other schools engaged in IDEAS in the last 3-5 years.

Research Process

All schools identified their priority areas which they aligned with their annual improvement plans. The research question intended to explore how school leaders use their SWP and meta-thinking about organisational process to respond to school priority areas and answer authentically to system and government requirements.

The researchers have tracked the four schools over the last 12 months through group discussion and collected data. Preliminary themes emerging from this data centre on the concept of alignment. This report provides preliminary findings on system-school alignment and internal school alignment factors.

System-School Alignment

System accountability requirements such as school wide planning, pedagogy, teacher quality processes, teacher and leader formation, and annual improvement plans are captured in Figure 1. It illustrates the way schools have utilised the school improvement agenda, including projects such as COSA, to respond to identified school improvement priority areas. The interrelationship between the components in Figure 1 show they complement each other and are vital to the success of school improvement strategies.

Each school identified priority area focused on improving student learning outcomes in literacy and/or numeracy. Projects were adopted as a strategy for responding to requirements. For example, all schools used COSA to enable teachers to collaborate and learn together to enhance teacher quality delivery. All reported that the time spent in developing a shared language of pedagogy enabled deep dialogue which resulted in increased confidence in teachers better able to talk to each other, to support each other and share in relevant professional learning.

The System focus on skinny goals (maximum of 3 per school), providing time (\$) for teachers to collaborate on analysis of their work informed by data, enabled the positive outcome of clear alignment. One school reported that the structure of professional learning communities had been enhanced through confident professionals, collecting data, spending time together to analyse the data and make judgements about the location of students within the band level. Careful analysis also enabled more focus for teachers on individual student learning needs.

Internal School Alignment

Preliminary findings indicate two factors crucial to enhancing school improvement.

1. Leadership
2. An agreed process for ongoing improvement

Leadership

All schools found that cohesion between the school improvement team which included the Principal in all cases was vital to sustaining a mindset for improvement. The Principals built trust within a culture that valued the opinions of teachers. Engagement of teachers increased when they were trusted. This in turn enabled them to look into their thinking and practice and not be content with mediocrity. The Principals through using data and relevant professional learning enabled teachers' critical review of current practice and subsequently raise expectations for student achievement.

Once the school communities had created a vision, values and schoolwide pedagogical framework, the Principal was able to develop an explicit articulation of school identity. Each school did this in their own particular way, however the visibility and authenticity of this identity is clearly evident both in visible imagery, documentation and practice. The schools have developed a meta-language for learning and practice. This is evident through the use of school awards, badges, banners and publications.

In all cases leadership reflecting relational trust between the Principal and/or executive and teacher leaders was clearly evident. This way of working once established continues to build on school improvement over a longer period of time, however should this relational trust be broken by a change in Principal or personnel without an induction process that ensures that incoming personnel will add value to the internal processes, the gains could be lost. One school reflected a concern about the possibility of this situation occurring.

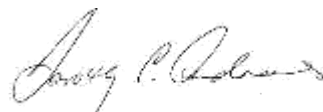
Ongoing Improvement

All schools were showing evidence of a mindset for ongoing improvement. Using COSA strategies enhanced the frameworks already in place. The culture that had been developed through teacher confidence in finding ways to address issues related to student learning. This culture enabled capacity building in teachers and was value added through systems initiatives, such as time; TPdD support processes; and specialised projects that upskilled teachers' pedagogical practices.

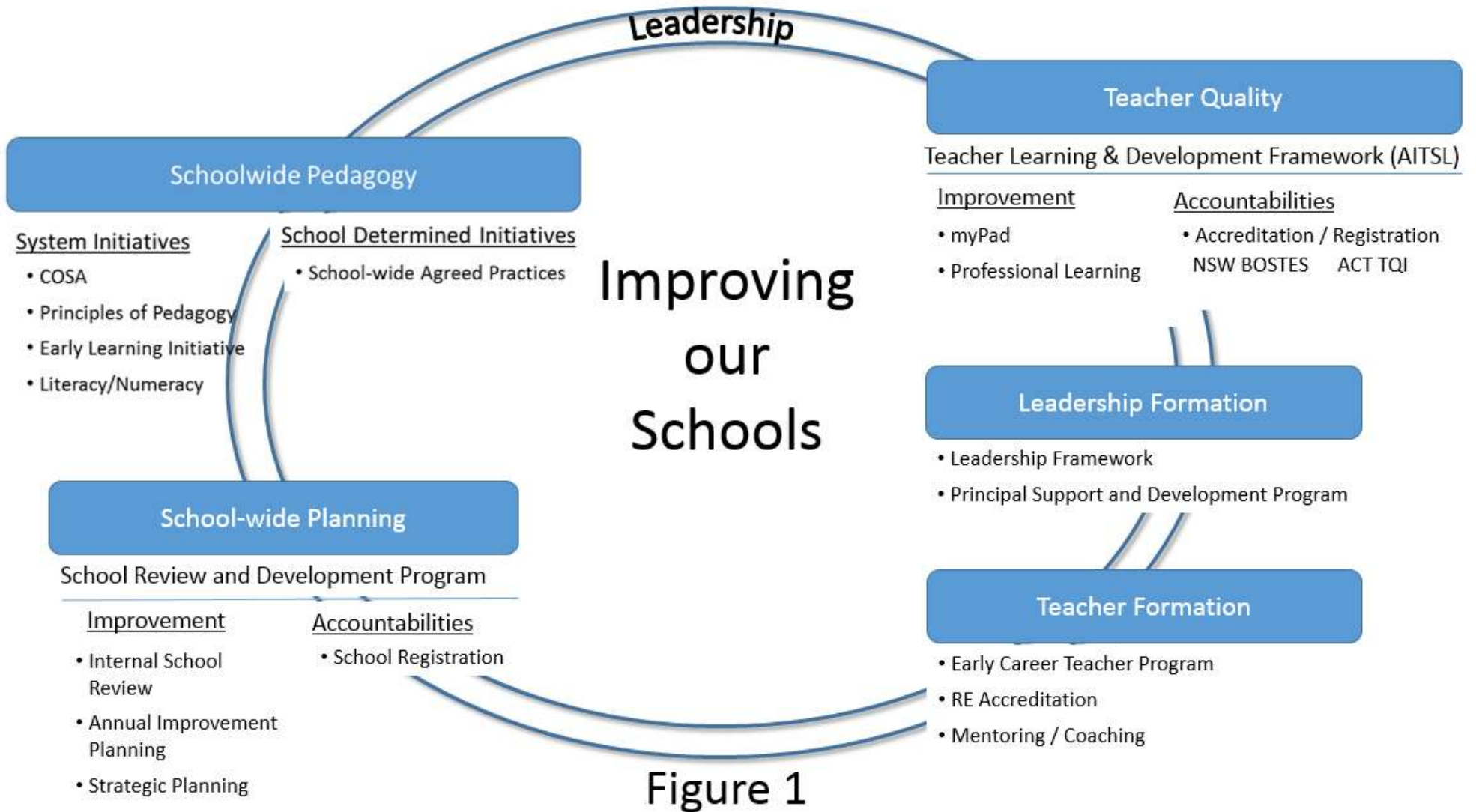
The tracking of this ongoing improvement will be a focus for the next phase of the data collection.



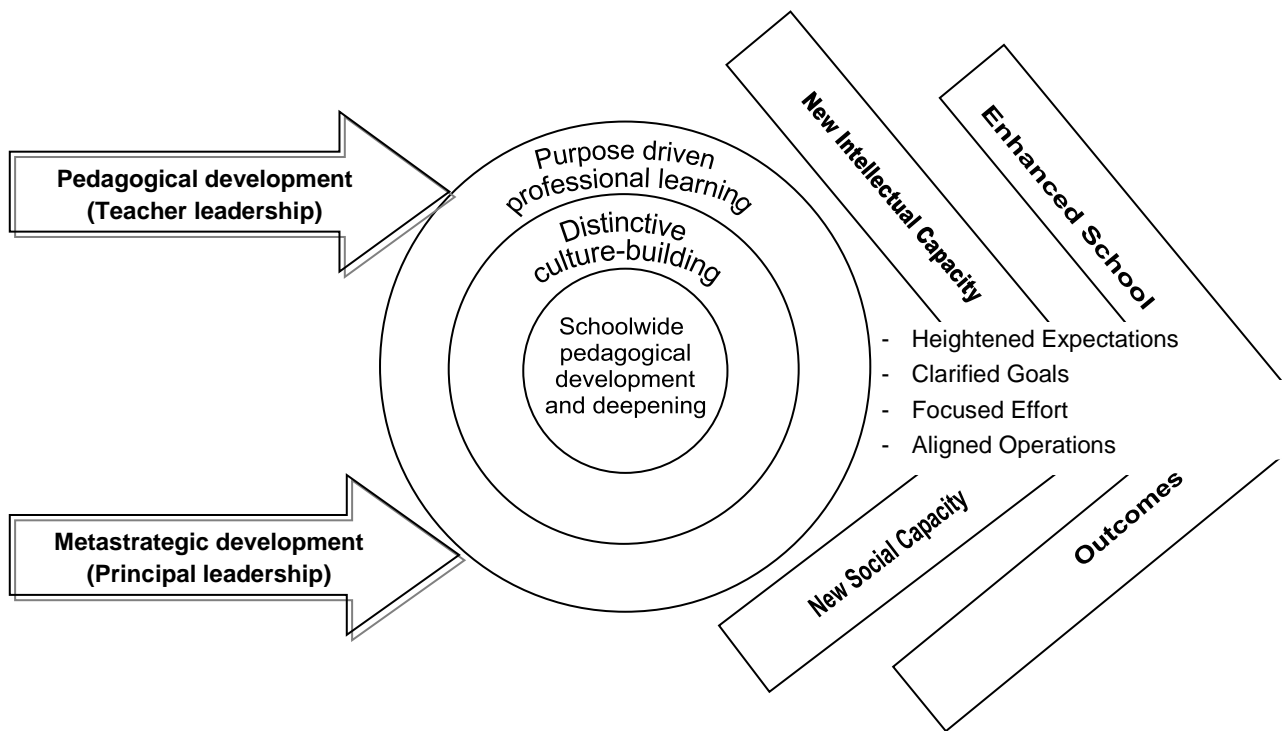
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Senior Officer Teacher Performance & Accreditation
School Services
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Appendix 3: Leadership for Within-School Capacity-Building



Adapted from Crowther, F., Ferguson, M., & Hann, L. (2009). *Developing teacher leaders: How teacher leadership enhances school success* (2nd ed.). Thousand Oaks, CA: Corwin Press, p. 60.

Appendix 4: e-PART Results for Improving Reading in Kindergarten

School B
**Kindergarten Class Report
Year 2016**

			LITERACY														NUMERACY									
			Running Record Level (0-30)		Phonological Awareness Score						Concepts About Print Score (0-24)		Letter ID Score (0-54)		Canberra Word Test Score (0-15)		Numeral ID Level (0-3)		Forward Number Word Sequence Level (0-5)		Backward Number Word Sequence Level (0-5)		Subitising E:Emergent P:Perceptual C:Conceptual		Early Arithmetic Strategies Level (0-4)	
Class	Student	Sex	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov
		M	1	3	1	8	3	3	3	4	6	16	5	48	0	6	0	2	1	4	0	2	E	P	0	1
		M	1	10	6	8	3	4	4	4	12	21	11	53	0	14	1	3	2	5	1	4	E	C	1	1
		M	11	23	7	8	2	4	3	4	14	23	54	54	13	15	3	3	1	5	1	4	E	P	1	2
		M	1	15	4	5	2	4	3	4	8	20	15	54	0	15	1	3	1	5	1	5	P	P	2	1
		M	1	9	8	8	4	4	3	4	14	21	27	54	0	15	1	3	2	5	1	3	P	C	1	3
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		M	1	17	8	8	4	4	4	4	11	23	2	54	0	15	1	3	2	5	1	5	P	C	1	3
		F	1	19	8	8	4	4	3	4	15	23	51	54	4	15	1	3	2	5	1	5	P	C	1	2

School B

		M	1	11	3	5	4	4	1	3	11	22	15	54	0	15	1	1	1	3	0	3	P	P	0	3
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School A

Kindergarten Class Report Year 2016

			LITERACY												NUMERACY											
			Running Record Level (0-30)		Phonological Awareness Score						Concepts About Print Score (0-24)		Letter ID Score (0-54)		Canberra Word Test Score (0-15)		Numeral ID Level (0-3)		Forward Number Word Sequence Level (0-5)		Backward Number Word Sequence Level (0-5)		Subitising E:Emergent P:Perceptual C:Conceptual		Early Arithmetic Strategies Level (0-4)	
Class	Student	Sex	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov
		M	0	8	2	8	0	3	4	4	12	20	4	54	0	14	0	3	4	5	1	5	E	C	1	3
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School A

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		M	0	5	8	8	2	4	2	2	13	21	17	54	0	14	0	1	1	3	0	3	E	C	1	3
		F	0	9	4	8	0	4	2	4	13	23	54	54	0	15	1	3	1	4	3	3	P	P	1	3
		M	0	24	8	8	2	4	4	4	21	23	54	54	3	15	1	3	4	5	3	5	P	C	2	4
		M	0	11	8	8	1	4	1	4	12	19	14	54	1		0	3	1	4	0	3	E	P	0	2
		M	0	9	4	7	0	4	0	4	12	18	0	54	0		0	3	1	5	0	5	E	C	0	4
		M	1	12	8	8	3	4	2	4	6	17	26	54			1	3	4	5	3	5	P	C	1	3
		F	0	12	6	8	2	4	4	4	5	20	43	54	1		1	3	3	5	1	3	E	C	1	3
		M	0	18	8	8	2	4	2	4	18	23	54	54	5	15	1	3	3	5	3	5	C	C	3	4
		M	0	24	8	8	2	4	4	4	15	23	51	54	6	15	3	3	5	5	4	5	C	C	3	4
		M		8		8		4		4		19		53				3		5		3		C		2
		F	0	14	2	8	0	4	0	4	11	22	32	54	1	15	1	3	3	5	0	5	P	C	0	4
		F	0	15	5	8	0	4	4	4	12	23	45	54	2	15	1	3	3	5	3	5	P	P	1	3
		F	15	30	8	8	4	4	3	3	22	24	54	54	15		3	3	4	5	3	5	E	C	2	4
		M	0	10	8	8	0	4	3	3	19	22	46	54	2	15	1	3	3	5	3	3	P	C	1	3
		M	0		7	8	1	4	4	4	13	19	25	52	0		1	3	3	3	0	3	E	C	1	2
		M	2	23	7	8	4	4	2	4	20	22	53	54	13	15	3	3	3	5	3	5	C	C	2	4
		F	0	14	2	8	0	4	2	4	16	22	46	54	2	15	1	3	3	5	3	5	P	C	1	4

School C
**Kindergarten Class Report
Year 2016**

Kindergarten Class Report Year 2016			LITERACY														NUMERACY									
			Running Record Level (0-30)		Phonological Awareness Score						Concepts About Print Score (0-24)		Letter ID Score (0-54)		Canberra Word Test Score (0-15)		Numeral ID Level (0-3)		Forward Number Word Sequence Level (0-5)		Backward Number Word Sequence Level (0-5)		Subitising E:Emergent P:Perceptual C:Conceptual		Early Arithmetic Strategies Level (0-4)	
Class	Student	Sex	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov
		F	11		7	8	4	4	4	2	17	21	50	54	4		1	3	5		4		C		3	
		F	10		8	8	3	4	2	2	11	20	26	52	0		0	2	1	4	0	3	E	C	1	2
		M	7		3	2	0	4	0	3	6	17	27	52	0		1	3	1	4	0	4	E	P	1	2
		M	1		4		1		1		11		6				0		0		0		E		0	
		M		5	2	8	1	2	3	3	10	18	20	53	0		0	3	1	4	0	2	E	C	1	2
		F	9		8		4		3		23		53				3		5		4		C		3	
		F	9		0	6	1	4	0	3	10	17	46	52	0		1	3	3	4	1	3	E	E	0	1
		M	10		7	8	4	4	3	3	15	21	48	51	7		2	3	4	5	3	5	C	C	1	4
		F	9		5	7	2	4	3	4	9	20	47	51	2		3	3	4	5	3	3	P	C	1	3
		M	16		8	8	4	4	4	4	19	23	54	53	15		1	3	5	5	3	4	P	P	1	3
		F	8		7	8	2	4	3	3	13	23	35	53	2		1	3	3	5	1	4	E	C	2	2
		F	10		7	8	4	4	1	3	15	23	42	54	4		1	3	3	5	3	5	E	C	1	3
		M	11		5	7	4	4	3	4	14	22	52	54	6		2	3	3	5	3	4	P	C	3	4
		F	7		2	1	0	4	3	2	10	18	18	51	0		0	1	0	3	0	2	E	E	0	1
		M	6		4	5	3	4	3	2	5	17	18	42	0		0	1	2	3	1	3	E	E	1	1
		M	1		2	2	2	1	2	0	8	13	0	10	0		0	0	1	0	0	0	E	E	0	1
		F	11		7	8	4	4	3	4	14	22	47	47	2		1	3	3	4	3	4	P	C	1	3
		M	5		3	4	0	3	0	1	7	16	24	48	0		1	3	1	3	1	3	E	C	1	2

School C

		F	1	3	0	1	3	1	2	5	9	26	41	0	0	1	0	0	0	0	E	E	0	1
		M	2	3	1	0	0	1	1	8	11	21	53	0	0	2	0	3	0	3	E	E	0	1
		F	7	6	7	0	4	1	3	10	20	33	52	0	0	1	0	3	1	3	E	E	0	1
		F	9	8	7	4	4	3	2	9	21	10	53	0	0	3	1	5	1	5	E	C	1	2

School D
**Kindergarten Class Report
Year 2016**

			LITERACY														NUMERACY									
			Running Record Level (0-30)		Phonological Awareness Score						Concepts About Print Score (0-24)		Letter ID Score (0-54)		Canberra Word Test Score (0-15)		Numeral ID Level (0-3)		Forward Number Word Sequence Level (0-5)		Backward Number Word Sequence Level (0-5)		Subitising E:Emergent P:Perceptual C:Conceptual		Early Arithmetic Strategies Level (0-4)	
Class	Student	Sex			Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov	Feb	Nov
		M	1	17	7	7	4	4	3	4	13	24	54	54	15		3	3	3	5	3	5	P	P	1	2
		F	5	20	8	8	4	4	0	4	16	22	54	54	15		1	3	3	5	1	3	P	P	1	3
		F	1	3	2	4	0	0	1	4	1	13	2	42			0	1	1	3	0	3	E	E	0	1
		M	1	13	0	8	4	4	0	4	9	23	39	54	13		3	3	5	5	3	5	C	C	1	4
		F	28	30	8	8	4	4	4	4	22	24	54	54	15		3	3	3	5	4	5	P	C	1	4
		M	1	16	6	8	2	4	1	4	7	22	42	54	14		1	3	4	5	2	5	P	P	1	3
		F	1	20	7	8	4	4	0	4	13	24	47	54	15		1	3	3	5	2	5	P	C	2	3
		F		11		8		4		4		24		54	15			3		5		5		C		3
		F	1	19	2	8	1	4	0	2	8	19	49	54	15		1	3	4	5	2	5	E	P	0	1
		F	1	10	2	8	0	4	0	4	4	19	40	53	14		0	3	1	4	1	4	E	P	1	1
		M	1	19	6	8	0	4	1	3	6	19	43	53	15		1	3	2	4	2	4	P	P	1	2
		M	1	12	2	8	0	3	1	3	6	19	9	53	15		0	3	1	5	2	4	E	P	0	1
		F	1	18	2	8	2	4	2	4	11	21	48	53	15		1	3	2	5	1	4	E	P	1	1
		M	1	25	6	8	4	4	2	4	14	23	54	54	15		1	3	3	5	3	5	P	C	1	3
		M	1	5	3	7	0	3	1	4	4	18	7	48	9		0	3	2	5	0	5	E	P	1	2
		M	1	18	0	8	4	4	0	0	7	22	32	54	15		1	3	3	5	1	5	E	C	1	3

School D

		M	2	22	7	8	2	4	0	4	12	23	50	53	15	1	3	2	5	1	5	E	P	1	2	
		M	1	24	8	8	0	4	0	4	12	24	34	54	15	1	3	3	5	0	5	E	P	1	3	
		F	1	8	0	1	3	3	0	4	12	20	27	54	13	1	3	3	4	1	2	P	P	1	2	
		M	1	19	4	8	0	4	1	4	5	21	53	53	15	1	3	2	5	2	5	E	P	1	1	
		M	1	17	6	8	1	4	1	4	10	22	46	54	15	1	3	2	5	2	4	E	P	0	2	
		M	2	23	5	8	3	4	3	4	10	22	48	54	15	1	3	3	5	3	4	P	C	1	3	
		M	23	30	8	8	4	4	4	4	21	24	54	54	15	3	3	5	5	5	5	C	C	3	4	
		M	1	8	0	8	0	4	0	4	10	19	5		11	0	2	1	2	1	3	P	P	0	1	
		F	1	20	2	8	0	4	0	4	13	23	54	54	15	2	3	4	5	3	5	P	C	1	3	
		F	1	11	4	7	0	4	0	4	5	18	42	54	14	1	3	1	4	1	4	E	P	0	1	
		M	1	23	5	8	4	4	3	4	13	23	54	54	15	1	3	3	5	3	5	P	C	2	3	
		M	1	11	2	8	0	4	0	3	5	20	26	53	15	0	3	1	4	1	3	E	E	0	1	
		F	1	19	0	8	0	4	0	4	9	23	47	54	15	1	3	2	5	2	5	E	P	0	3	
		M	1	16	8	8	4	4	0	4	13	22	30	54	15	3	3	5	5	3	5	P	C	3	4	
		F		20		8		4		4		24		54	15		3		5		4		C		3	
		M	1	8	4	7	0	4	2	2	3	18	9	52	12	0	2	1	4	0	3	E	P	0	1	
		M	1	19	6	8	1	4	0	4	10	22	46	54	15	3	3	4	5	3	5	C	C	4	4	
		M	1	8	8	8	0	4	0	4	7	19	3	54	13	1	3	2	5	0	5	E	P	1	4	
		M	1	10	2	8	0	4	1	3	5	19	17	52	14	0	3	1	4	0	4	E	E	0	1	
		M	1	12	8	8	1	4	0	3	8	19	15	52	0	14	1	3	2	5	2	5	P	P	1	2
		F	1	8	8	8	3	4	0	4	2	20	7	53	14	1	3	4	5	1	4	P	P	1	3	